



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Subject: **INFORMATION: Participation in
Funding for Ecological Mitigation**

From: **Associate Administrator
for Program Development**

To: **Regional Administrators
Federal Lands Highway Program Administrator**

Date: **JUL 25 1995**

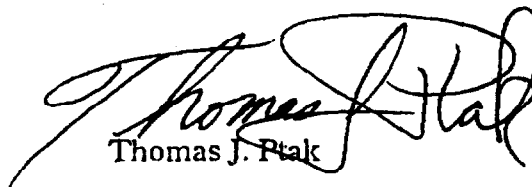
Reply to
Attn. of: **HEP-42**

The ISTEA provides new authority and encourages flexibility in mitigating ecological impacts caused by transportation projects. Although such authority has been assumed in the past as part of the NEPA objectives, the ISTEA specifically identifies mitigation of impacts to natural habitats and ecosystems as eligible for Federal-aid funding participation.

The ISTEA also encourages incorporation of ecological considerations early in the transportation system planning and development process. Statewide and Metropolitan Transportation Planning should include considerations of the protection of important natural ecosystems and biological resources.

The following guidance establishes minimum conditions and requirements for Federal-aid funding of ecological mitigation, including development of ecological mitigation banks along the same general concepts as wetland banks (presented in the memorandum, "Funding for Establishment of Wetland Mitigation Banks," dated October 24, 1994). This approach can be especially useful when mitigating impacts to endangered species.

The FHWA field offices are encouraged to use the full authority of the ISTEA, coordinate with State and Federal resource management agencies, and cooperate with State DOTs to the greatest extent practicable in exploring and implementing innovative approaches for reducing and mitigating ecological impacts of transportation projects.


Thomas J. Ptak

Attachment

FHWA:HEP-42:PGarrett:nb:6/13/95:x62067

Revised:6/15/95:6/22/95:6/30/95:7/6/95:7/10/95:7/17/95:7/20/95:7/25/95

Disk:Paul's, File name:ECOBANK2.MEM

cc: HPD-1, HEP-1, HEP-40, HEP-41, HEP-30, HEP-31, HEP-32, HEP-20,
HCC-31(VCherwek), HRW-21(RMoeller), HNG-12(JOverton),
HEP-42(FBank), HEP-42(PGarrett), HEP-42(2Files)



Guidelines for Federal-aid Participation in the Mitigation of Impacts to Upland Ecosystems and the Establishment of Ecological Mitigation Banks

I Background

Construction, operation, and maintenance of highway projects can cause impacts to important, natural, upland ecosystems and landscapes, as well as to wetlands. According to authority established under the ISTEA, § 1007, Surface Transportation Program (23 U.S.C. § 133 (b)(1)), where such impacts are determined to be adverse or unacceptable through the NEPA compliance process, they should be mitigated by feasible and practicable measures. Adverse or unacceptable ecological impacts may be those that threaten the continued existence of species listed under the Endangered Species Act (ESA), or cause substantial detrimental effects to, or losses of, natural ecological communities that are biologically unique, of special ecological importance, or have substantial societal value. Feasible or practical mitigation measures include, but are not limited to, restoration of altered or degraded landscapes to replace the impacted biological resources, or preservation or enhancement of existing resources where such opportunities exist.

Where several projects with impacts to threatened and endangered species habitats or other important ecosystems have been identified, or are anticipated, banking of compensatory mitigation for impacts to ecosystems may be an effective approach. Banked areas could include uplands and habitats for threatened and endangered species in addition to wetlands. Off-site banking could be a mitigation alternative of choice in situations where ecosystems or habitats of federally-protected species are being impacted or subjected to increased risk due to cumulative or secondary development impacts. Such banks could mitigate impacts from several projects over a broad area, and result in better planning and cooperation in endangered species management. At least two examples of this approach are now being used.

In Florida, the DOT has established an upland ecological mitigation bank with State funds to mitigate anticipated impacts to a number of species protected under State and Federal endangered species laws. Federal-aid highway funds will be used to reimburse the State as credits in the bank are withdrawn to compensate for impacts to protected species by Federal-aid highway projects. In Michigan, the DOT and the FHWA Division Office have cooperated to establish a 1,000 acre mitigation site with Federal-aid funds to mitigate impacts to endangered species habitat caused by a Federal-aid highway project.

Mitigation banking offers opportunities to consolidate, manage, and protect ecosystems and ecological resources. Banks can also help to maintain a wider range of mitigation alternatives for transportation projects and other construction development. On-site measures to avoid and minimize impacts remain the first and preferable alternative. However, where impacts cannot be feasibly avoided, moving the location of compensatory mitigation away from centers of business, commercial and residential development, and transportation projects can often improve management of integrated ecosystems to perform more natural functions, provide more ecological services to society, and allow for better planning to meet human development needs.

II General Authority

Interagency environmental management initiatives, such as the Watershed Management Program, emphasize the preservation of natural ecosystems while encouraging local decisionmaking. This approach is supported by the White House Office of Environmental Policy. Federal Agencies have been encouraged to incorporate management and planning strategies into their organizational objectives and programs to minimize losses of important natural ecosystems and landscapes and protect natural ecological functions. These functions include natural biological productivity, biodiversity, nutrient cycling, and landscape stability.

The ESA requires Federal Agencies to establish programs and procedures to conserve listed species. On September 28, 1994, the FHWA signed an interagency Memorandum of Agreement (MOA) on implementation of the ESA. The MOA emphasizes interagency coordination and advance planning to reduce conflicts between programs of different government agencies and better manage impacts to endangered species and their habitats.

Mitigation of "damage to wildlife, habitat, and ecosystems caused by a transportation project funded under" the Surface Transportation Program is specifically identified as eligible for Federal-aid participation in 23 U.S.C., § 133 (b) (1).

III FHWA Policy for Mitigation of Impacts to Natural Ecosystems and Endangered Species

Costs related to mitigating impacts to unique, rare, threatened, or otherwise valuable upland, habitat resources and ecosystems are eligible for Federal-aid participation under the authority established in 23 U.S.C., § 133 (b) (1). Costs eligible for Federal-aid funding include land acquisition; measures necessary to

establish mitigation, such as revegetation, site preparation, fencing, irrigation or water control structures, pest management, litter removal, access control, fire control; and mitigation performance monitoring. Site establishment is considered complete when construction activities are completed and approved, or when cooperating agencies agree that the project mitigation goals have been met.

Mitigation establishment periods may be as short as 1-3 years on some sites, or up to 20 years on slow-maturing sites. For **Federal-aid projects** where the mitigation is not successfully established at the end of a previously agreed-upon period, the establishment period may be extended for a **predetermined** time if the FHWA finds that such an extension would result in the successful completion of the mitigation goals.

Interagency mitigation agreements should include provisions for the transfer of management responsibilities to an appropriate resource agency once the establishment period expires. However, there may be instances when restoration activities are required to ensure that the mitigation site continues to function as originally intended. In these cases, separate activities such as after ecological mitigation is successfully established and interagency agreements regarding mitigation establishment no longer apply, restoration activities might be required to ensure that the mitigation site continues to function as originally intended. Activities such as (but not limited to) refencing, upgrades to water supply systems, vegetation management, animal pest control, fire control, flood damage repair, and human access control (when required to sustain established mitigation) are eligible for Federal-aid funding under the Surface Transportation Program.

Preference should be given to mitigation activities, such as banks, which provide multispecies or ecosystem function benefits. Often ecological communities which are rare or limited provide habitat for species which, although not listed as endangered or threatened, are potential candidates for listing. By participating in cooperative, proactive measures, the need for listing might be avoided. For that reason, FHWA policy encourages participation in development of long-range, biotic community or ecosystem-oriented plans for mitigation of anticipated endangered species impacts.

These guidelines are consistent with the NEPA, requirements of the ESA, and FHWA policy on mitigation established in 23 CFR 771.105. Environmental Impact Policy, 23 CFR 771.105 (d), states that, "Measures to mitigate adverse impacts **[will]** be incorporated into the action" (a Federal-aid highway project). Mitigation includes avoiding impacts, minimizing impacts, and (where impacts are unavoidable) compensating for impacts.

IV Property Acquisition Criteria

If Federal funds are involved in any part of the project for which the mitigation is intended, the acquisition of property interests for purposes of ecological mitigation sites and banking activities will necessarily be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended, Pl 91-646 (42 U.S.C. 4601). If acquisitions are site specific and subject to use of the power of eminent domain, all provisions of the Uniform Act implementing regulations at 49 CFR Part 24 are applicable.

If acquisitions are not site specific and eminent domain authority will not be used, then the acquisition could be defined as "voluntary" and only the limited requirements of 49 CFR 24.101 (a) (1) and (2) would apply. If however, the acquisition would displace tenant occupants, the relocation assistance provisions of 49 CFR Part 24 would also apply.

Establishment of ecological mitigation sites and banks might require the acquisition of a property interest, either through easement or fee title. The public interest in ecological mitigation sites must be sufficient to ensure that the area is protected in its intended condition as a natural ecological community. This can be accomplished by a restrictive covenant or easement that is attached to the title of the property, or by transfer of title in fee, through purchase or donation to a public or quasi-public, non-profit resource management interest or agency. Up-front costs associated with easements, covenants, or property transfers are eligible for Federal-aid participation, and should encompass activities necessary to ensure that ecological functions are perpetuated and protected at mitigation sites.

Sale of mitigation credits in ecological mitigation banks or other mitigation activities established with Federal-aid transportation funds for the purpose of mitigating anticipated impacts due to highway or surface transportation projects, to private or public entities or agencies for mitigation of impacts due to nonFederal-aid, transportation projects, or nontransportation-related activities, is not allowable.